

Before the FEDERAL COMMUNICATIONS COMMISSION EB = 4 1993 Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSI	J١
OFFICE OF THE SECRETARY	

In the Matter of

Amendment of Section 73.202(b),
FM Table of Allotments,
FM Broadcast Stations.
(Corydon, Indiana and Shively, Kentucky)

RM-\_\_\_\_

TO: Andrew J. Rhodes, Chief Allocations Branch, Policy and Rules Division Mass Media Bureau

### PETITION FOR RULE MAKING

1. Power Communications, Inc. ("Power"), licensee of Station WGZB-FM, Corydon, Indiana, hereby petitions the Commission to initiate a rule making proceeding in order to amend the FM Table of Allotments, Section 73.202(b) of the Commission's Rules, to reallot Channel 243A from Corydon, Indiana to Shively, Kentucky. Station WGZB-FM presently operates on Channel 243A. The changes in the Table proposed by Power are as follows:

	<u>Existing</u>	Proposed	
Corydon, IN	243A, 299B	299B	
Shively, KY		243A	

In the event that the proposed reallotment is adopted by the Commission, Power also requests that the Commission modify the license of Station WGZB-FM to reflect that its city of license is Shively, rather than Corydon, and to relocate the station's transmitter as contemplated herein.

2. As set forth in the accompanying Technical Statement, the proposed change in the community of allotment of Channel 243A can be accomplished consistently with all Commission

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rules and regulations and with all outstanding licenses, construction permits, vacant allocations, pending applications and pending rule making proposals. Further, the proposed change can be accomplished without disruption to or significant physical modification of the operation of Station WGZB-FM. <sup>1</sup>/ Indeed, the proposed change is technically mutually exclusive with Power's present assignment. As a result, the license of Station WGZB-FM may be modified pursuant to Section 1.420(i) of the Rules.

- Corydon to Shively is clearly in the public interest. Corydon is a community with a 1990 U.S. Census population of 3,045 persons; it presently has two FM channels allotted to it, as well as a local AM radio station. Shively, by contrast, has a 1990 U.S. Census population of more than 15,000, nearly five times that of Corydon; also by contrast, Shively has no local radio service. Thus, Corydon would retain two local radio services notwithstanding the proposed removal of Channel 243A, while Shively -- a substantially larger community -- would obtain its first local radio service. Such a reallotment would be consistent with well-established Commission allocation priorities. See, e.g., FM Assignment Policies and Procedures, 51 R.R.2d 807 (1982).
  - 4. Shively is an incorporated place with its own mayor

The proposed reference point utilized in the accompanying Technical Statement would entail a relatively slight relocation of the transmitter of Station WGZB-FM. Power understands that that reference point is available for use as the station's transmitter site, and Power hereby represents its willingness to relocate the station's transmitter to that site.

and city council (with eight members). 21 The City of Shively has its own police department, fire department, street maintenance department, planning and zoning board, city library, public school system, recreational facilities (30-acre city park, tennis courts, golf course) and garbage collection services. At least one civic organization, one major department store, one bank and one savings and loan institution are located in Shively, as are two distilleries and a cookie factory. Clearly, Shively is an independent community deserving of its first local transmission service. See, e.g., FM Channel Assignments (Beech Mountain, NC), 69 R.R.2d 1731 (Mass Media Bureau 1991).

5. In light of the foregoing, the proposed reallotment of Channel 243A from Corydon to Shively would be consistent with the Commission's rules, regulations and policies. Accordingly, Power Communications, Inc. requests that Channel 243A be reallotted from Corydon, Indiana to Shively, Kentucky, and that the license of Station WGZB-FM be modified to reflect that its community of license is Shively, and not Corydon.

Respectfully submitted,

/s/ Harry F. Cole Harry F. Cole

Bechtel & Cole, Chartered 1901 L Street, N.W. - Suite 250 Washington, D.C. 20036 (202) 833-4190

Counsel for Power Communications, Inc.

February 4, 1993

Information set forth above concerning Shively has been obtained from the office of the City Clerk of Shively.

## TECHNICAL STATEMENT IN SUPPORT OF PETITION FOR RULE MAKING FM CHANNEL 243A POWER COMMUNICATIONS, INC. SHIVELY, KENTUCKY

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### TECHNICAL STATEMENT IN SUPPORT OF PETITION FOR RULE MAKING OF POWER COMMUNICATIONS, INC. SHIVELY, KENTUCKY

### INTRODUCTION

This technical statement and associated exhibits have been prepared on behalf of Power Communications, Inc. (herein "Petitioner") licensee of WGZB-FM, Corydon, Indiana, in support of a Petition for Rule Making.

Petitioner requests the amendment of 47 CFR 73.202(b) by the re-allotment of channel 243A (grandfathered 3 kW) from Corydon, Indiana, to Shively, Kentucky. Whereas the requested change is mutually exclusive with the present channel 243A allotment at Corydon, Petitioner invokes the provisions of 47 CFR 1.420(i).

Station WGZB-FM is currently operating on channel 243A at Corydon, Indiana, with an effective radiated power of 3 kilowatts and antenna height above average terrain of 100 meters, as authorized by BLH-900503KC.

Corydon, Indiana, with a 1990 U.S. Census population of 3045 persons, presently has two commercial FM assignments, namely, WGZB-FM, and a new channel 299B facility which was granted a construction permit (BPH-860221MT) on October 2, 1991. In addition, there is one AM assignment, WOCC-AM on 1550 kHz.

Shively, Kentucky, with a 1990 U.S. Census population of 15,154 persons, has no local FM, AM or TV service. Petitioner's proposal would therefore bring a first local broadcast service to Shively, and would not deprive Corydon of local broadcast service.

### PROPOSED CHANGE IN FM TABLE OF ALLOTMENTS

Petitioner herein requests modification of the FM Table of Allotments, 47 CFR 73202(b) as follows: re-allotment of channel 243A to Shively, Kentucky and the modification of the license of WGZB-FM accordingly. The proposed change is as follows:

PRESENT:

CITY

CHANNEL

Corydon, Indiana

243A, 299B

PROPOSED:

CITY

CHANNEL

Corydon, Indiana

299B

Shively, Kentucky

243A

### COMPLIANCE WITH FCC RULES

Figure 1 is a tabulation of a detailed FM separation study pertinent to the use of channel 243A at Shively. The geographic coordinates of the proposed reference point used for distance calculations are for an area which is already in use for several broadcast and communications towers of the type necessary (see Figures 2 and 3) for the proposed Shively FM facility.

The following reference point has been selected for channel 243A at Shively:

Latitude:

38-16-05

Longitude: 85-56-25

Figure 2 illustrates the location of the proposed reference point on a USGS 7.5 minute topographic map. The proposed reference point is located approximately 14.2 kilometers northwest of the Shively, Kentucky reference point listed in the

Index to the USGS National Atlas. Operation from this site, or in the adjacent area, with maximum grandfathered Class A facilities (ERP 3 kW, 100 meters) would provide the requisite 70 dBu coverage of Shively (see Figures 4 and 5) in compliance with 47 CFR 73.315.

The proposed reference point is not located within 290 kilometers of a U.S. border and, therefore, foreign concurrence is not required.

The proposed reference point complies with the Commission's minimum distance separation requirements for grandfathered Class A facilities contained in 47 CFR 73.207 to all known Licenses, Construction Permits, Open Allocations, pending Applications, and pending Rule Makings.

Pursuant to 47 CFR 1.420(i), the Commission will consider petitions to modify the license of an FM station to specify a new community if the proposed allotment would be mutually exclusive with the present assignment. As the proposed reference point would be short-spaced to the present WGZB-FM site by 96 kilometers, the proposed allotment is mutually exclusive with the existing allotment.

### POPULATION AND AREAS

The present WGZB-FM operation provides FM primary (60 dBu, 1mV/m) service to a land area of approximately 1827.5 square kilometers containing an estimated population (1990 census) of 412,131 persons.

Operation from the proposed reference point with maximum grandfathered Class A facilities would provide FM primary service to a land area of approximately 1790.4 square kilometers containing an estimated population of 699,597 persons (1990 census).

### **SUMMARY**

Channel 243A (grandfathered 3kW) can be re-alloted from Corydon, Indiana to Shively, Kentucky in apparent compliance with all applicable Commission Rules. The instant proposal will result in a first local broadcast service to Shively, Kentucky, population 15,154. The proposal would not deprive Corydon of local FM broadcast service. Therefore, Petitioner requests the re-allotment of channel 243A (grandfathered 3 kW) to Shively and the modification of the WGZB-FM license accordingly.

Respectfully Submitted, Broadcast Technical, Inc.

<u>y:\_1\_\_\_\_</u>

Kenneth Devine

January, 1993

## FIGURE 1 FM SEPARATION STUDY PETITION FOR RULE MAKING FM CHANNEL 243A POWER COMMUNICATIONS, INC. SHIVELY, KENTUCKY

REFERENCE 38 16 05 N 85 56 25 W			CLAS	S A			AY DATES CH 1-18-93
05 50 25 77		Previ	ious rule	spacin	igs		
		CHANI	NEL 243	- 96.5	MHz		
CALL TYPE	CH# LAT	CITY LNG	STATE PWR	BEAR' HT	D-KM D-Mi	R-KM R-Mi	MARGIN (KM)
	38 12 52	<b>Corydon</b> 86 01 00 s, Inc. BLH9005		<b>228.3</b> 100M	<b>8.95</b> <i>5.6</i>		
	38 10 25	<b>Corydon</b> 85 54 50 as, Inc. BPH9102	2.35 kW	167.6 158M	10.73 6.7		
	<b>244A</b> 37 49 09 nty Broadco	Bardstown 85 29 10 asting Co BLH79		141.3 49M	64.0 (* round	64.0 led to neare	0.00 * est kilometer)
<b>WJAA</b> <i>LI CN Midland Me</i>		<b>Austin</b> 85 49 26 LH911028KF	IN 3.0 kW	<b>9.0</b> 100M	<b>64.75</b> 40.2	<b>64.0</b> 39.8	0.75
	38 44 30	<b>Madison</b> 85 21 41 asting, I BLH880		<b>43.8</b> 97M	<b>72.90</b> <i>45.3</i>	<b>64.0</b> 39.8	8.90
	<b>244A</b> 37 42 01 nty Broadco	Bardstown 85 27 22 asting Co BPH91		146.0 100M	<b>76.03</b> <i>47.3</i>	<b>64.0</b> 39.8	12.03
		Hamilton 84 19 30 Orporatio BLH86		<b>49.4</b> <i>247M</i>	<b>184.91</b> <i>114.9</i>	<b>163.0</b> <i>101.3</i>	21.91
PREPAR	ED BY:			BROA	DCAST	TECHNIC	CAL, INC.

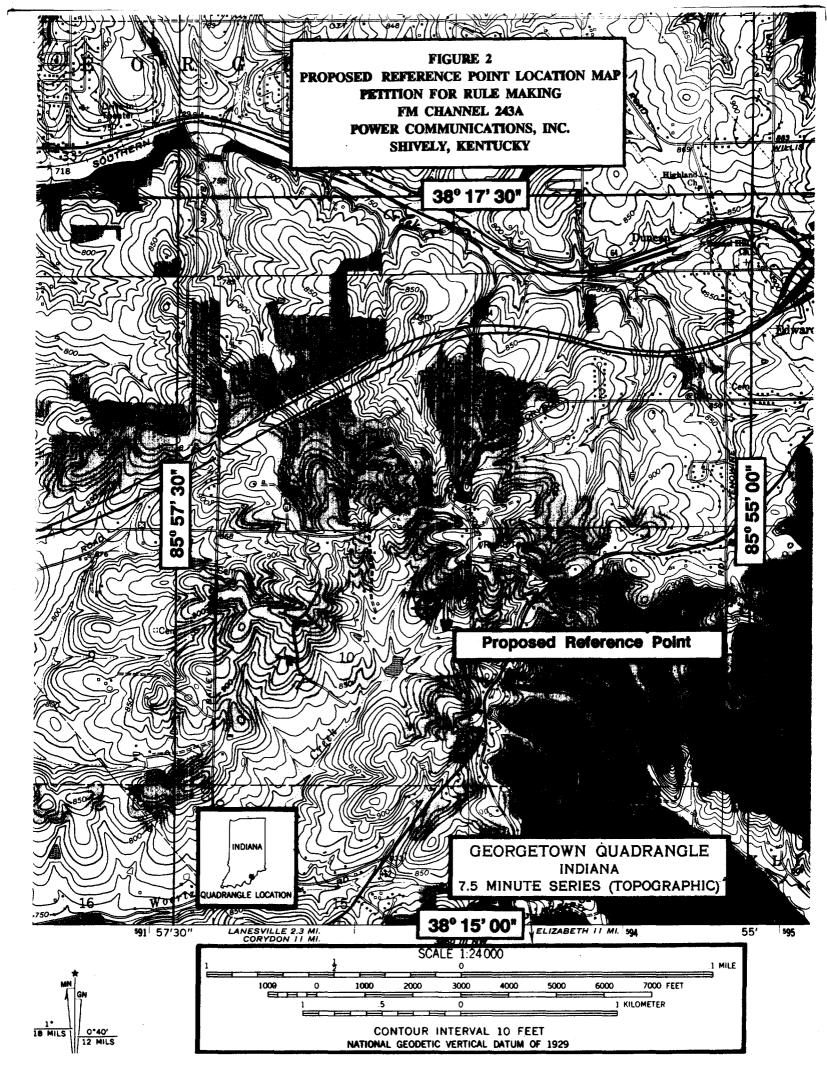
NEW ORLEANS, LOUISIANA

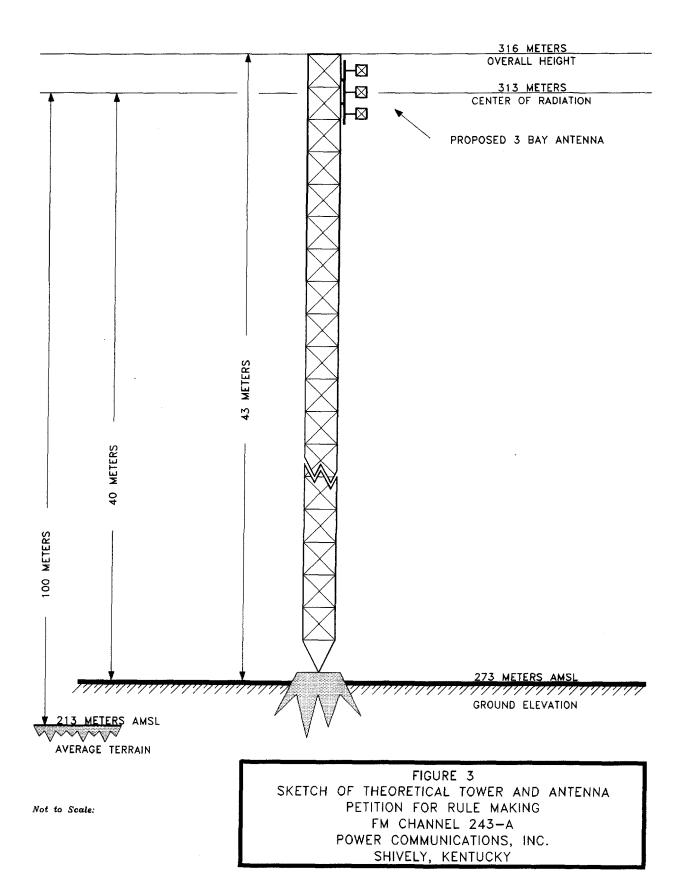
January, 1993

# FIGURE 1, Page 2 FM SEPARATION STUDY PETITION FOR RULE MAKING FM CHANNEL 243A POWER COMMUNICATIONS, INC. SHIVELY, KENTUCKY

REFERENCE 38 16 05 N			CLAS	S A		DISPLA SEARC DAT	CH 1-18-93
85 56 25 W		Prev	ious rul	e spacii	ngs	DAI	A 1-10-73
		CHAN	NEL 243	96.5	MHz		
CALL TYPE	CH# LAT	CITY LNG	STATE PWR	BEAR' HT	D-KM D-Mi	R-KM R-Mi	MARGIN (KM)
	245A	Tell City	IN	242.9	68.38	27.0	41.38
CP CN Carolyn S.	37 59 14 Hagedorn	86 38 04 BPH891206MH	6.0 kW	100M	42.5	16.8	
wsto	241C	Owensboro	KY	246.1	136.07	94.0	42.07
LI CN	37 46 20			W 305M	84.6	58.4	
Owensboro	o-on-the-Air	; Inc. BLH82060	IAO				
WBWB	244A	Bloomington	IN	335.0	109.58	64.0	45.58
LI CN	39 09 46	86 28 21	1.65 kW	134M	68.1	39.8	
University	Broadcasti	ng Compa BLH80	50515KB				

### **END CHANNEL 243A STUDY**





### FIGURE 4 PROPOSED REFERENCE POINT ELEVATION AND CONTOUR DATA PETITION FOR RULE MAKING POWER COMMUNICATIONS, INC. SHIVELY, KENTUCKY

ERP = 3 kW FM - 2-6 Tables

Antenna Radiation Center AMSL = 313 meters

Geographic Coordinates: North latitude: 38 16 05

West longitude: 85 56 25

Ave. Elev. Azimuth Deg T.	Effective 3 to 16 km Meters AMSL	Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 60 dBu Contour km	F(50-50)  Distance to  70 dBu Contour  km
0	239.1	73.9	4.771	20.9	11.7
1	239.5	73.5	4.771	20.9	11.6
2	239.9	73.1	4.771	20.8	11.6
3	239.6	73.4	4.771	20.8	11.6
4	239.4	73.6	4.771	20.9	11.6
5	238.7	74.3	4.771	21.0	11.7
6	239.4	73.6	4.771	20.9	11.6
7	240.2	72.8	4.771	20.8	11.6
8	241.0	72.0	4.771	20.7	11.5
9	242.1	70.9	4.771	20.5	11. <del>4</del>
10	243.4	69.6	4.771	20.3	11.3
11	244.3	68.7	4.771	20.2	11.3
12	245.4	67.6	4.771	20.0	11.2
13	246.3	66.7	4.771	19.9	11.1
14	247.1	65.9	4.771	19.8	11.1
15	247.4	65.6	<b>4</b> .771	19.8	11.1
16	247.5	65.5	4.771	19.8	11.0
17	246.9	66.1	4.771	19.8	11.1
18	245.9	67.1	4.771	20.0	11.2
19	245.1	67.9	4.771	20.1	11.2
20	245.4	67.6	4.771	20.0	11.2
21	247.2	65.8	4.771	19.8	11.1
22	250.4	62.6	4.771	19.3	10.8
23	254.1	58.9	4.771	18.8	10.6
24	257.0	56.0	4.771	18.3	. 10.3
25	258.7	54.3	4.771	18.0	10.1
26	260.0	53.0	4.771	17.8	10.0
27	261.2	51.8	4.771	17.6	9.9
28	262.3	50.7	4.771	17.4	9.8
29	263.0	50.0	4.771	17.2	9.7
30	263.4	49.6	4.771	17.1	9.7
31	263.4	49.6	4.771	17.1	9.7
32	262.7	50.3	4.771	17.3	9.7
33	261.4	51.6	4.771	17.5	9.9
34	259.8	53.2	4.771	17.8	10.0
35	258.3	54.7	4.771	18.1	10.2

Ave. Elev.	Effective		FDD	F(60-60) Distance to 60 dBu Contour	F(50-50) Distance to 70 dBu Contour
Azimuth Deg T.	3 to 16 km Meters AMSL	Antenna Height Meters AAT	ERP (dBk)	km	km
36	257.3	55.7	4.771	18.3	10.3
30 37	257.3 257.2	55.8	4.771	18.3	10.3
38	257.8	55.2	4.771	18.2	10.2
39	258.9	54.1	4.771	18.0	10.1
40	259.4	53.6	4.771	17.9	10.1
41	258.0	55.0	4.771	18.2	10.2
42	254.0	59.0	4.771	18.8	10.6
43	247.7	65.3	4.771	19.7	11.0
44	240.4	72.6	4.771	20.7	11.6
45	233.6	79.4	4.771	21.7	12.0
46	228.8	84.2	4.771	22.3	12.4
47	225.4	87.6	4.771	22.7	12.6
48	222.3	90.7	4.771	23.1	12.8
49	218.7	94.3	4.771	23.5	13.1
50	214.4	98.6	4.771	24.1	13.4
51	210.1	102.9	4.771	24.6	13.6
52	206.1	106.9	4.771	25.0	13.9
53	202.8	110.2	4.771	25.3	14.1
54	200.0	113.0	4.771	25.6	14.3
55	197.3	115.7	4.771	25.9	14.5
56	194.3	118.7	4.771	26.2	14.7
57	191.3	121.7	4.771	26.4	14.9
58	188.2	124.8	4.771	26.7	15.0
59	185.2	127.8	4.771	26.9	15.2
60	182.1	130.9	4.771	27.2	15.4
61	178.9	134.1	4.771	27.5	15.7
62	175.9	137.1	4.771	27.8	15.9
63	173.0	140.0	4.771	28.0	16.1
64	170.4	142.6	4.771	28.2	16.2
65	168.2	1 <del>44</del> .8	4.771	28.4	16.4
66	166.5	146.5	4.771	28.6	16.5
67	165.1	147.9	4.771	28.7	16.6
68	163.8	149.2	4.771	28.8	16.7
69	162.5	150.5	4.771	28.9	16.8
70	161.2	151.8	4.771	29.0	16.9
71	159.9	153.1	4.771	29.2	16.9
72	158.4	154.6	4.771	29.3	17.0
73	156.8	156.2	4.771	29.4	17.1
74	155.6	157.4	4.771	29.5	17.2
75	154.6	158.4	4.771	29.6	17.3
76	153.9	159.1	4.771	29.7	17.3
77	153.6	159.4	4.771	29.7	17.3
78	153.3	159.7	4.771	29.7	17.4
79	152.9	160.1	4.771	29.8	17.4
80	152.0	161.0	4.771	29.9	17.4
81	151.1	161.9	4.771	29.9	17.5
82	150.4	162.6	4.771	30.0	17.5

Ave. Elev. Azimuth	Effective 3 to 16 km	Antenna Height	ERP	F(50-50) Distance to 60 dBu Contour	F(50-50) Distance to 70 dBu Contour
Deg T.	Meters AMSL	Meters AAT	(dBk)	<u>km</u>	km
83	150.0	163.0	4.771	30.0	17.6
84	149.7	163.3	4.771	30.1	17.6
85	149.6	163.4	4.771	30.1	17.6
86	149.7	163.3	4.771	30.1	17.6
87	149.6	163.4	4.771	30.1	17.6
88	149.5	163.5	4.771	30.1	17.6
89	149.5	163.5	4.771	30.1	17.6
90	149.5	163.5	4.771	30.1	17.6
91	149.6	163.4	4.771	30.1	17.6
92	149.3	163.7	4.771	30.1	17.6
93	148.6	164.4	4.771	30.2	17.6
94	148.0	165.0	4.771	30.2	17.7
95	147.4	165.6	4.771	30.3	17.7
96	146.7	166.3	4.771	30.3	17.7
97	145.9	167.1	4.771	30.4	17.8
98	145.2	167.8	4.771	30.5	17.8
99	144.6	168.4	4.771	30.5	17.9
100	144.3	168.7	4.771	30.5	17. <del>9</del>
101	144.4	168.6	4.771	30.5	17.9
102	144.5	168.5	4.771	30.5	17.9
103	144.6	168.4	4.771	30.5	17.9
104	144.7	168.3	4.771	30.5	17.9
105	144.8	168.2	4.771	30.5	17. <del>9</del>
106	145.1	167.9	4.771	30.5	17.8
107	145.3	167.7	4.771	30.4	17.8
108	145.7	167.3	4.771	30.4	17.8
109	145.9	167.1	4.771	30.4	17.8
110	145.9	167.1	4.771	30.4	17.8
111	145.9	167.1	4.771	30.4	17.8
112	145.6	167.4	4.771	30.4	17.8
113	145.2	167.8	4.771	30.5	17.8
114	144.6	168.4	4.771	30.5	17.9
115	143.7	169.3	4.771	30.6	17. <del>9</del>
116	142.8	170.2	4.771	30.7	18.0
. 117	141.7	171.3	4.771	30.8	18.0
118	140.6	172.4	4.771	30.9	18.1
119	139.6	173.4	4.771	30.9	18.1
120	138.8	174.2	4.771	31.0	18.2
121	138.3	174.7	4.771	31.1	18.2
122	138.1	174.9	4.771	31.1	18.2
123	138.4	174.6	4.771	31.1	18.2
124	139.1	173.9	4.771	31.0	18.2
125	140.3	172.7	4.771	30.9	18.1
126	142.0	171.0	4.771	30.7	18.0
127	143.8	169.2	4.771	30.6	17.9
128	145.4	167.6	4.771	30.4	17.8
129	146.6	166.4	4.771	30.3	17.8

Ave. Elev. Azimuth	Effective 3 to 16 km	Antenna Height Meters AAT	ERP (dBk)	F(50-50)  Distance to  60 dBu Contour  km	F(50-50) Distance to 70 dBu Contour km
Deg T.	Meters AMSL		4.771	30.3	17.7
130	147.2	165.8 465.7	4.771	30.3	17.7
131	147.3	165.7	4.771	30.3	17.7
132	147.3	165.7		30.3	17.7
133	147.4	165.6	4.771 4.771	30.2	17.7
134	147.8	165.2		30.2	17.6
135	148.5	164.5	4.771	30.2 30.1	17.6
136	148.8	164.2	4.771	30.1 30.2	17.7
137	148.1	164.9	4.771		17.7
138	146.8	166.2	4.771	30.3 30.4	17.8
139	145.8	167.2	4.771		17.8
140	145.0	168.0	4.771	30.5	17.9
141	144.5	168.5	4.771	30.5	17.9
142	144.0	169.0	4.771	30.6	
143	143.7	169.3	4.771	30.6	17.9
144	143.6	169.4	4.771	30.6	17.9
145	143.6	169.4	4.771	30.6	17.9
146	143.6	169.4	4.771	30.6	17.9
147	143.8	169.2	4.771	30.6	17.9
148	144.3	168.7	4.771	30.5	17.9
149	145.0	168.0	4.771	30.5	17.8
150	146.3	166.7	4.771	30.4	17.8
151	148.0	165.0	4.771	30.2	17.7
152	149.8	163.2	4.771	30.0	17.6
153	151.5	161.5	4.771	29.9	17.5
15 <b>4</b>	153.1	159.9	4.771	29.8	17.4
155	154.8	158.2	4.771	29.6	17.3
156	156.4	156.6	4.771	29.5	17.2
157	157.7	155.3	4.771	29.3	17.1
158	158.6	154.4	4.771	29.3	17.0
159	159.4	153.6	4.771	29.2	17.0
160	160.4	152.6	4.771	29.1	16.9
161	162.2	150.8	4.771	29.0	16.8
162	165.1	147.9	4.771	28.7	16.6
163	169.1	143.9	4.771	28.3	16.3
164	173.8	139.2	4.771	27.9	16.0
165	179.2	133.8	4,771	27.5	15.6
166	185.6	127.4	4.771	26.9	15.2
167	193.4	119.6	4.771	26.2	14.7
168	203.6	109.4	4.771	25.3	14.1
169	216.3	96.7	4.771	23.8	13.2
170	229.2	83.8	4.771	22.2	12.3
171	239.1	73.9	4.771	20.9	11.7
172	246.1	66.9	4.771	20.0	11.2
173	252.2	60.8	4.771	19.1	10.7
174	257.6	55.4	4.771	18.2	10.2
175	261.4	51.6	4.771	17.5	9.9
176	263.6	49.4	4.771	17.1	9.6

Ave. Elev.	Effective			F(60-50) Distance to 60 dBu Contour	F(50-50) Distance to 70 dBu Contour
Azimuth Deg T.	3 to 16 km Meters AMSL	Antenna Height Meters AAT	ERP (dBk)	km	km
177	264.0	49.0	4.771	17.0	9.6
178	263.9	49.1	4.771	17.0	9.6
179	262.2	50.8	4.771	17.4	9.8
180	260.5	52.5	4.771	17.7	10.0
181	259.0	54.0	4.771	18.0	10.1
182	257.5	55.5	4.771	18.3	10.3
183	255.9	57.1	4.771	18.5	10.4
184	254.6	58.4	4.771	18.7	10.5
185	253.3	59.7	4.771	18.9	10.6
186	251.9	61.1	4.771	19.1	10.7
187	250.4	62.6	4.771	19.3	10.8
188	249.2	63.8	4.771	19.5	10.9
189	248.5	64.5	4.771	19.6	11.0
190	247.6	65.4	4.771	19.7	11.0
191	246.1	66.9	4.771	20.0	11.2
192	243.9	69.1	4.771	20.3	11.3
193	241.9	71.1	4.771	20.5	11.5
194	240.1	72.9	4.771	20.8	11.6
195	238.8	74.2	4.771	21.0	11.7
196	237.6	75.4	4.771	21.1	11.8
197	236.5	76.5	4.771	21.3	11.8
198	235.6	77.4	4.771	21.4	11.9
199	235.0	78.0	4.771	21.5	11.9
200	234.7	78.3	4.771	21.5	12.0
201	234.9	78.1	4.771	21.5	12.0
202	235.4	77.6	4.771	21.4	11.9
203	235.6	77.4	4.771	21.4	11.9
204	235.3	77.7	4.771	21.4	11.9
205	234.7	78.3	4.771	21.5	12.0
206	234.4	78.6	4.771	21.5	12.0
207	234.5	78.5	4.771	21.5	12.0
208	234.6	78.4	4.771	21.5	12.0
209	234.0	79.0	4.771	21.6	12.0
210	232.9	80.1	4.771	21.7	12.1
211	231.8	81.2	4.771	21.9	12.2
212	231.2	81.8	4.771	22.0	12.2
213	231.0	82.0	4.771	22.0	12.2
214	231.0	82.0	4.771	22.0	12.2
215	231.1	81.9	4.771	22.0	,12.2
216	231.3	81.7	4.771	22.0	12.2
217	231.5	81.5	4.771	21.9	12.2
218	231.3	81.7	4.771	22.0	12.2
219	230.8	82.2	4.771	22.0	12.2
220	229.9	83.1	4.771	22.1	12.3
221	229.0	84.0	4.771	22.3	12.4
222	228.1	84.9	4.771	22.4	12.4
223	227.5	85.5	4.771	22.4	12.5

Deg T.   Meters AMSL   Meters AAT   GeB4   km   km   km	Ave. Elev. Azimuth	Effective 3 to 16 km	Antenna Height	ERP	F(60-60) Distance to 60 dBu Contour	F(60-60) Distance to 70 dBu Contour
225         226.2         86.8         4.771         22.6         12.6           226         225.3         87.7         4.771         22.7         12.8           227         224.1         88.9         4.771         23.0         12.7           228         222.8         90.2         4.771         23.0         12.8           229         221.3         91.7         4.771         23.2         12.9           230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           232         215.6         97.4         4.771         23.7         13.3           232         215.6         97.4         4.771         24.1         13.4           234         212.9         100.1         4.771         24.1         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         24.0         13.3           237         216.9         96.1         4.771         23.8         13.1           239         219.6         93	Deg T.	Meters AMSL	Meters AAT	(dBk)		
226         225.3         87.7         4.771         22.7         12.6           227         224.1         88.9         4.771         22.9         12.7           228         222.8         90.2         4.771         23.0         12.8           229         221.3         91.7         4.771         23.2         12.9           230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           232         215.6         97.4         4.771         23.9         13.3           232         215.6         97.4         4.771         24.1         13.4           233         213.9         99.1         4.771         24.2         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         24.2         13.4           236         214.9         98.1         4.771         23.8         13.1           237         216.9         96.1         4.771         23.8         13.1           238         218.4         94.	224	226.9	86.1			
227         224.1         88.9         4.771         22.9         12.7           228         22.8         90.2         4.771         23.0         12.8           229         221.3         91.7         4.771         23.2         12.9           230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           231         217.7         95.3         4.771         23.9         13.3           232         213.9         99.1         4.771         24.1         13.4           234         212.9         100.1         4.771         24.1         13.4           234         212.9         90.1         4.771         24.2         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         23.8         13.2           236         214.9         96.1         4.771         23.6         13.1           237         216.9         96.1         4.771         23.6         13.1           239         219.6         93.	225	226.2	86.8			
228         222.8         90.2         4.771         23.0         12.8           229         221.3         91.7         4.771         23.2         12.9           230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           232         215.6         97.4         4.771         23.9         13.3           233         213.9         99.1         4.771         24.1         13.4           234         212.9         100.1         4.771         24.2         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         24.2         13.4           236         214.9         98.1         4.771         23.8         13.2           238         218.4         94.6         4.771         23.8         13.1           239         219.6         93.4         4.771         23.8         13.1           239         219.6         93.4         4.771         23.3         12.2           241         222.0         25	226	225.3	87.7			
229         221.3         91.7         4.771         23.2         12.9           230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           232         215.6         97.4         4.771         23.9         13.3           233         213.9         99.1         4.771         24.1         13.4           234         212.9         100.1         4.771         24.2         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         24.2         13.4           236         214.9         98.1         4.771         23.8         13.2           237         216.9         96.1         4.771         23.8         13.2           238         218.4         94.6         4.771         23.6         13.1           239         219.6         93.4         4.771         23.3         12.9           241         222.8         90.2         4.771         23.3         12.9           241         222.8         90	227	224.1	88.9			
230         219.6         93.4         4.771         23.4         13.0           231         217.7         95.3         4.771         23.7         13.1           232         215.6         97.4         4.771         23.9         13.3           233         213.9         99.1         4.771         24.1         13.4           234         212.9         100.1         4.771         24.2         13.5           235         213.3         99.7         4.771         24.2         13.4           236         214.9         98.1         4.771         24.0         13.3           237         216.9         96.1         4.771         23.8         13.2           238         218.4         94.6         4.771         23.6         13.1           239         219.6         93.4         4.771         23.6         13.1           239         219.6         93.4         4.771         23.6         13.1           239         219.6         93.4         4.771         23.6         13.1           240         221.0         92.0         4.771         23.6         12.7           241         222.8         22	228	222.8	90.2	4.771		
231 217.7 95.3 4.771 23.7 13.1 232 215.6 97.4 4.771 23.9 13.3 233 213.9 99.1 4.771 24.1 13.4 234 212.9 100.1 4.771 24.2 13.5 235 213.3 99.7 4.771 24.2 13.4 236 214.9 98.1 4.771 24.2 13.3 237 216.9 96.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.8 13.2 238 218.4 94.6 4.771 23.8 13.2 239 219.6 93.4 4.771 23.4 13.0 240 221.0 92.0 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 242 224.7 88.3 4.771 22.6 12.7 243 226.3 86.7 4.771 22.6 12.7 244 227.5 85.5 4.771 22.6 12.5 244 227.5 85.5 4.771 22.4 12.5 246 230.8 82.2 4.771 22.0 12.2 247 232.8 80.2 4.771 22.0 12.2 248 230.8 82.2 4.771 22.0 12.2 249 235.5 77.5 4.771 21.8 12.1 249 235.5 77.5 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 77.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 11.9 255 234.3 78.7 4.771 21.4 11.9 255 234.3 78.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 11.9 255 234.3 78.7 4.771 21.4 11.9 256 235.7 77.3 4.771 21.4 11.9 257 229.2 83.8 4.771 22.0 12.2 258 234.3 78.7 4.771 21.4 11.9 259 227.6 85.4 4.771 22.0 12.2 258 228.2 84.8 4.771 22.0 12.2 258 228.2 84.8 4.771 22.0 12.2 258 227.6 85.4 4.771 22.5 12.5 260 227.3 85.7 4.771 22.5 12.5 261 227.2 85.8 4.771 22.4 12.5 262 227.6 85.4 4.771 22.5 12.5 263 228.3 84.7 4.771 22.5 12.5 264 229.0 84.0 4.771 22.3 12.4 265 228.7 84.3 4.771 22.3 12.4 266 228.7 84.3 4.771 22.3 12.4 267 228.1 84.9 4.771 22.3 12.4 268 227.3 85.7 4.771 22.3 12.4 268 228.7 84.3 4.771 22.3 12.4 268 229.0 84.0 4.771 22.3 12.4 268 229.0 84.0 4.771 22.3 12.4 269 228.1 84.9 4.771 22.3 12.4 269 228.1 84.9 4.771 22.3 12.4 269 228.1 84.9 4.771 22.3 12.4 269 228.1 84.9 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5 269 226.4 86.6 4.771 22.5 12.5	229	221.3	91.7	4.771		
232 215.6 97.4 4.771 23.9 13.3 233 213.9 99.1 4.771 24.1 13.4 23.2 213.5 213.3 99.1 4.771 24.1 13.5 23.5 213.3 99.7 4.771 24.2 13.5 23.5 213.3 99.7 4.771 24.2 13.4 23.6 214.9 98.1 4.771 24.0 13.3 23.7 216.9 96.1 4.771 23.8 13.2 23.8 218.4 94.6 4.771 23.8 13.2 23.8 218.4 94.6 4.771 23.6 13.1 23.9 219.6 93.4 4.771 23.4 13.0 224.0 221.0 92.0 4.771 23.3 12.9 241 222.8 90.2 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 24.2 224.7 88.3 4.771 22.8 12.7 24.3 226.3 86.7 4.771 22.6 12.5 24.4 227.5 85.5 4.771 22.6 12.5 24.4 227.5 85.5 4.771 22.6 12.5 24.4 227.5 85.5 4.771 22.4 12.5 24.6 230.8 82.2 4.771 22.0 12.2 24.7 232.8 80.2 4.771 22.0 12.2 24.7 232.8 80.2 4.771 21.8 12.1 22.4 24.8 23.4 78.6 4.771 21.8 12.1 22.0 12.2 24.7 232.8 80.2 4.771 21.8 12.1 22.0 12.2 24.7 232.8 80.2 4.771 21.6 12.0 12.2 24.9 23.5.5 77.5 4.771 21.4 11.9 25.5 23.3 77.7 4.771 21.4 11.9 25.5 23.3 77.7 4.771 21.4 11.9 25.5 23.3 77.7 4.771 21.4 11.9 25.5 23.3 23.0 80.0 4.771 21.4 11.9 25.5 23.3 23.0 80.0 4.771 21.4 11.9 25.5 23.3 23.0 80.0 4.771 21.4 11.9 22.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.4 12.5 12.2 25.5 231.2 81.8 4.771 22.4 12.5 12.2 25.5 231.2 81.8 4.771 22.4 12.5 12.2 25.5 231.2 81.8 4.771 22.4 12.5 12.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.0 12.2 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 25.5 231.2 81.8 4.771 22.4 12.5 22.2 23.3 23.0 22.8 33.8 4.771 22.2 12.3 22.2 23.8 23.8 23.8 4.771 22.2 12.3 23.8 22.2 23.8 23.8 4.771 22.2 12.3 23.8 22.2 23.8 23.8 4.771 22.5 12.5 25.5 25.5 25.5 25.5 25.5 25.	230	219.6	93.4	4.771		
233 213.9 99.1 4.771 24.1 13.4 234 212.9 100.1 4.771 24.2 13.5 235 213.3 99.7 4.771 24.2 13.5 236 214.9 98.1 4.771 24.0 13.3 237 216.9 96.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.6 13.1 239 219.6 93.4 4.771 23.4 13.0 240 221.0 92.0 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 242 224.7 88.3 4.771 22.8 12.7 243 226.3 86.7 4.771 22.8 12.7 244 227.5 85.5 4.771 22.6 12.5 244 227.5 85.5 4.771 22.6 12.5 245 228.9 84.1 4.771 22.3 12.4 246 230.8 82.2 4.771 22.0 12.2 247 232.8 80.2 4.771 22.1 12.5 248 234.4 78.6 4.771 21.8 12.1 249 235.5 77.5 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 77.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 11.9 255 234.3 78.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 11.9 255 233.1 28.8 4.771 21.4 11.9 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 257 229.2 83.8 4.771 22.0 12.2 258 230.2 82.8 4.771 21.4 11.9 259 227.6 85.4 4.771 21.6 12.0 258 230.2 82.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.4 12.5 260 227.3 85.7 4.771 22.5 12.5 261 227.2 85.8 4.771 22.4 12.5 262 227.3 85.7 4.771 22.3 12.4 264 229.0 84.0 4.771 22.3 12.4 265 229.2 83.8 4.771 22.5 12.5 261 227.2 85.8 4.771 22.3 12.4 264 229.0 84.0 4.771 22.3 12.4 265 229.2 83.8 4.771 22.3 12.4 266 228.7 84.3 4.771 22.3 12.4 267 228.1 84.9 4.771 22.3 12.4 268 227.3 85.7 4.771 22.3 12.4 268 227.3 85.7 4.771 22.3 12.4 268 227.3 85.7 4.771 22.3 12.4 268 227.3 85.7 4.771 22.4 12.5 269 228.1 84.9 4.771 22.4 12.5 269 228.1 84.9 4.771 22.4 12.5 269 226.4 86.6 4.771 22.4 12.5	231	217.7	95.3	4.771		
234 212.9 100.1 4.771 24.2 13.5 235 213.3 99.7 4.771 24.2 13.4 236 214.9 98.1 4.771 24.0 13.3 237 216.9 96.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.6 13.1 239 219.6 93.4 4.771 23.4 13.0 240 221.0 92.0 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 242 224.7 88.3 4.771 22.8 12.7 243 226.3 86.7 4.771 22.8 12.7 244 227.5 85.5 4.771 22.6 12.5 244 227.5 85.5 4.771 22.4 12.5 245 228.9 84.1 4.771 22.3 12.4 246 230.8 82.2 4.771 22.3 12.4 248 234.4 78.6 4.771 21.8 12.1 248 234.4 78.6 4.771 21.8 12.1 250 235.7 77.3 4.771 21.4 11.9 251 235.3 77.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 11.9 255 233.0 80.0 4.771 21.4 11.9 256 230.0 80.0 4.771 21.4 11.9 257 229.2 83.8 4.771 22.0 12.2 258 230.0 81.0 4.771 21.4 11.9 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 21.4 11.9 259 235.5 77.5 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 37.7 7.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.4 12.9 12.2 255 231.2 81.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 82.8 4.771 22.0 12.2 258 230.2 83.8 4.771 22.0 12.2 258 230.2 83.8 4.771 22.0 12.2 258 230.2 83.8 4.771 22.0 12.2 258 228.2 84.8 4.771 22.0 12.2 258 228.2 84.8 4.771 22.4 12.5 260 227.6 85.4 4.771 22.3 12.4 264 229.0 84.0 4.771 22.3 12.4 265 229.2 83.8 4.771 22.3 12.4 266 228.7 84.3 4.771 22.3 12.4 267 228.1 84.9 4.771 22.3 12.4 268 227.3 85.7 4.771 22.4 12.5 269 226.4 86.6 4.771 22.4 12.5 269 226.4 86.6 4.771 22.4 12.5 269 226.4 86.6 4.771 22.4 12.5	232	215.6	97.4			
235 213.3 99.7 4.771 24.2 13.4 236 214.9 96.1 4.771 23.8 13.2 237 216.9 96.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.6 13.1 239 219.6 93.4 4.771 23.4 13.0 240 221.0 92.0 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 242 224.7 88.3 4.771 22.8 12.7 243 226.3 86.7 4.771 22.6 12.5 244 227.5 85.5 4.771 22.6 12.5 245 228.9 84.1 4.771 22.3 12.4 246 230.8 82.2 4.771 22.3 12.4 246 230.8 82.2 4.771 22.0 12.2 247 232.8 80.2 4.771 21.8 12.1 248 234.4 78.6 4.771 21.8 12.1 250 235.7 77.5 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 77.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 253 233.0 80.0 4.771 21.4 11.9 254 232.0 81.0 4.771 21.7 12.1 255 234.3 78.7 4.771 21.4 11.9 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 21.4 11.9 257 229.2 83.8 4.771 21.4 11.9 258 231.2 81.8 4.771 21.4 11.9 259 232.6 80.0 4.771 21.4 11.9 259 232.0 81.0 4.771 21.7 12.1 254 232.0 81.0 4.771 21.7 12.1 255 231.2 81.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.1 12.3 257 229.2 83.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.2 12.3 258 228.3 84.7 4.771 22.4 12.5 260 227.6 85.4 4.771 22.3 12.4 264 229.0 84.0 4.771 22.3 12.4 265 229.2 83.8 4.771 22.3 12.4 266 229.0 84.0 4.771 22.3 12.4 266 228.7 84.3 4.771 22.3 12.4 266 228.7 84.3 4.771 22.3 12.4 267 228.1 84.9 4.771 22.3 12.4 268 228.7 84.3 4.771 22.3 12.4 269 228.1 84.9 4.771 22.3 12.4 269 228.1 84.9 4.771 22.3 12.4 269 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.2 12.3 260 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.4 12.5 260 228.1 84.9 4.771 22.4 12.5 260 228.4 86.6 4.771 22.6 12.5	233	213.9	99.1	4.771		
238 214.9 98.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.6 13.1 239 219.6 93.4 4.771 23.4 13.0 240 221.0 92.0 4.771 23.3 12.8 12.9 241 222.8 90.2 4.771 23.0 12.8 12.7 243 226.3 86.7 4.771 22.8 12.7 244 227.5 85.5 4.771 22.6 12.5 244 227.5 85.5 4.771 22.3 12.4 12.5 248 234.4 78.6 4.771 21.8 12.1 12.9 23.5 12.1 25.5 12.5 235.3 77.7 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 233.0 80.0 4.771 21.4 11.9 252 234.3 78.7 4.771 21.6 12.0 253 233.0 80.0 4.771 21.6 12.0 253 233.0 80.0 4.771 21.6 12.0 255 234.3 78.7 4.771 21.6 12.0 255 235.3 233.0 80.0 4.771 21.6 12.0 255 234.3 78.7 4.771 21.6 12.0 255 234.3 78.7 4.771 21.6 12.0 255 235.3 233.0 80.0 4.771 21.9 12.2 256 235.2 236.3 85.4 4.771 22.5 12.0 255 235.3 233.0 80.0 4.771 21.6 12.0 255 235.3 233.0 80.0 4.771 21.6 12.0 255 235.3 233.0 80.0 4.771 21.7 12.1 21.5 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 256 230.2 83.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.1 12.3 257 229.2 83.8 4.771 22.2 12.3 258 228.2 84.8 4.771 22.2 12.3 258 228.2 84.8 4.771 22.2 12.3 256 229.2 83.8 4.771 22.5 12.5 260 227.3 85.7 4.771 22.5 12.5 260 227.6 85.4 4.771 22.5 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 266 228.7 84.3 4.771 22.3 12.4 22.5 256 229.2 83.8 4.771 22.5 12.5 266 228.7 84.3 4.771 22.3 12.4 22.5 256 229.2 83.8 4.771 22.5 12.5 266 229.2 83.8 4.771 22.5 12.5 266 229.2 83.8 4.771 22.5 12.5 266 229.7 85.4 4.771 22.3 12.4 22.5 256 229.2 83.8 4.771 22.5 12.5 266 229.0 84.0 4.771 22.3 12.4 22.4 22.5 22.6 227.6 85.4 4.771 22.3 12.4 22.4 22.5 22.6 227.6 85.4 4.771 22.3 12.4 22.5 22.5 22.6 227.6 85.4 4.771 22.3 12.4 22.5 22.5 22.5 22.8 22.8 22.8 22.8 22.8	234	212.9	100.1	4.771		
237 216.9 96.1 4.771 23.8 13.2 238 218.4 94.6 4.771 23.6 13.1 23.9 219.6 93.4 4.771 23.6 13.1 23.9 219.6 93.4 4.771 23.3 12.9 241 222.8 90.2 4.771 23.3 12.9 241 222.8 90.2 4.771 23.0 12.8 12.7 243 226.3 86.7 4.771 22.8 12.7 243 226.3 86.7 4.771 22.6 12.5 244 227.5 85.5 4.771 22.4 12.5 245 228.9 84.1 4.771 22.3 12.4 246 230.8 82.2 4.771 22.0 12.2 247 232.8 80.2 4.771 22.0 12.2 248 234.4 78.6 4.771 21.8 12.1 24.8 234.4 78.6 4.771 21.5 12.0 23.5 12.0 235.7 77.5 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 250 235.7 77.3 4.771 21.4 11.9 251 235.3 77.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.4 11.9 252 234.3 78.7 4.771 21.6 12.0 12.0 253 233.0 80.0 4.771 21.7 12.1 21.0 255 23.2 81.8 4.771 22.0 12.2 255 231.2 81.8 4.771 22.0 12.2 255 231.2 81.8 4.771 22.0 12.2 255 231.2 81.8 4.771 22.0 12.2 255 231.2 81.8 4.771 22.0 12.2 256 230.2 82.8 4.771 22.1 12.3 257 229.2 83.8 4.771 22.1 12.3 258 228.2 84.8 4.771 22.1 12.3 259 227.6 85.4 4.771 22.4 12.5 12.5 260 227.3 85.7 4.771 22.5 12.5 12.5 260 227.6 85.4 4.771 22.5 12.5 12.5 260 227.6 85.4 4.771 22.5 12.5 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.5 12.5 260 227.6 85.4 4.771 22.5 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.3 85.7 4.771 22.5 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.6 85.4 4.771 22.3 12.4 22.5 260 227.8 83.8 4.771 22.5 12.5 260 227.8 83.8 4.771 22.5 12.5 260 227.6 85.4 4.771 22.3 12.4 22.5 25 22.2 83.8 84.7 4.771 22.5 12.5 25 262 227.6 85.4 4.771 22.3 12.4 22.5 25 22.2 83.8 84.7 4.771 22.3 12.4 22.5 25 22.5 22.5 22.5 22.5 22.5 22.	235	213.3	99.7	4.771		
238         218.4         94.6         4.771         23.6         13.1           239         219.6         93.4         4.771         23.4         13.0           240         221.0         92.0         4.771         23.3         12.9           241         222.8         90.2         4.771         23.0         12.8           242         224.7         88.3         4.771         22.6         12.5           243         226.3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         22.0         12.2           247         232.8         80.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.	236	214.9	98.1	4.771		
239         219.6         93.4         4.771         23.4         13.0           240         221.0         92.0         4.771         23.3         12.9           241         222.8         90.2         4.771         23.0         12.8           242         224.7         88.3         4.771         22.8         12.7           243         226.3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         22.0         12.2           247         232.8         80.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.	237	216.9	96.1			
240         221.0         92.0         4.771         23.3         12.9           241         222.8         90.2         4.771         23.0         12.8           242         224.7         88.3         4.771         22.8         12.7           243         226.3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         21.8         12.1           246         230.8         82.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.6         12.0           253         233.0         80.	238	218.4	94.6	4.771		
241         222.8         90.2         4.771         23.0         12.8           242         224.7         88.3         4.771         22.6         12.5           243         226.3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         22.0         12.2           247         232.8         80.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.6         12.0           253         233.0         80.0         4.771         21.6         12.0           253         231.2         81.	239	219.6	93.4	4.771		
242         224.7         88.3         4.771         22.8         12.7           243         226.3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.0         12.2           246         230.8         82.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.6         12.0           253         233.0         80.0         4.771         21.6         12.0           253         231.2         81.8         4.771         21.9         12.2           255         231.2         81.	240	221.0	92.0	4.771		
243         226,3         86.7         4.771         22.6         12.5           244         227.5         85.5         4.771         22.4         12.5           245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         21.8         12.1           247         232.8         80.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.6         12.0           253         233.0         80.0         4.771         21.6         12.0           254         232.0         81.0         4.771         21.7         12.1           254         230.2         82.8         4.771         22.0         12.2           256         230.2         82.	241	222.8	90.2	4.771		
244       227.5       85.5       4.771       22.4       12.5         245       228.9       84.1       4.771       22.3       12.4         246       230.8       82.2       4.771       22.0       12.2         247       232.8       80.2       4.771       21.8       12.1         248       234.4       78.6       4.771       21.5       12.0         249       235.5       77.5       4.771       21.4       11.9         250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.4       11.9         253       233.0       80.0       4.771       21.4       11.9         254       232.0       81.0       4.771       21.7       12.1         254       232.0       81.8       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8	242	224.7	88.3	4.771		
245         228.9         84.1         4.771         22.3         12.4           246         230.8         82.2         4.771         22.0         12.2           247         232.8         80.2         4.771         21.8         12.1           248         234.4         78.6         4.771         21.5         12.0           249         235.5         77.5         4.771         21.4         11.9           250         235.7         77.3         4.771         21.4         11.9           251         235.3         77.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.4         11.9           252         234.3         78.7         4.771         21.6         12.0           253         233.0         80.0         4.771         21.7         12.1           254         232.0         81.0         4.771         21.7         12.1           255         231.2         81.8         4.771         22.0         12.2           255         231.2         83.	243	226.3	86.7	4.771		
246       230.8       82.2       4.771       22.0       12.2         247       232.8       80.2       4.771       21.8       12.1         248       234.4       78.6       4.771       21.5       12.0         249       235.5       77.5       4.771       21.4       11.9         250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         255       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.1       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.8       4.771       22.4       12.5         260       227.3       85.8	244	227.5	85.5	4.771		
247       232.8       80.2       4.771       21.8       12.1         248       234.4       78.6       4.771       21.5       12.0         249       235.5       77.5       4.771       21.4       11.9         250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.1       12.3         258       228.2       84.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.5         260       227.3       85.4       4.771       22.4       12.5         261       227.2       85.8	245	228.9	84.1	4.771		
247       232.8       80.2       4.771       21.8       12.1         248       234.4       78.6       4.771       21.5       12.0         249       235.5       77.5       4.771       21.4       11.9         250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.1       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.8       4.771       22.5       12.5         261       227.2       85.8		230.8	82.2	4.771		
249       235.5       77.5       4.771       21.4       11.9         250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.3       12.4         264       229.0       84.0		232.8	80.2	4.771		
250       235.7       77.3       4.771       21.4       11.9         251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.4       12.5         262       227.6       85.4       4.771       22.3       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0		234.4	78.6	4.771		
251       235.3       77.7       4.771       21.4       11.9         252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8		235.5	77.5	4.771	21.4	
252       234.3       78.7       4.771       21.6       12.0         253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.5       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.3       12.4         266       228.7       84.3	250	235.7	77.3	4.771	21.4	
253       233.0       80.0       4.771       21.7       12.1         254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.3       12.4         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9	251	235.3	77.7	4.771	21.4	
254       232.0       81.0       4.771       21.9       12.2         255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9	252	234.3	78.7	4.771	21.6	
255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6	253	233.0	80.0	4.771	21.7	
255       231.2       81.8       4.771       22.0       12.2         256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.5         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6	254	232.0	81.0	4.771	21.9	
256       230.2       82.8       4.771       22.1       12.3         257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5	255	231.2	81.8	4.771	22.0	12.2
257       229.2       83.8       4.771       22.2       12.3         258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5		230.2	82.8	4.771	22.1	12.3
258       228.2       84.8       4.771       22.4       12.4         259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.3       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5		229.2	83.8	4.771	22.2	12.3
259       227.6       85.4       4.771       22.4       12.5         260       227.3       85.7       4.771       22.5       12.5         261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5		228.2	84.8	4.771	22.4	12.4
261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5	259	227.6	85.4	4.771	22.4	12.5
261       227.2       85.8       4.771       22.5       12.5         262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5	260	227.3	85.7	4.771	22.5	12.5
262       227.6       85.4       4.771       22.4       12.5         263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5		227.2	85.8	4.771	22.5	12.5
263       228.3       84.7       4.771       22.3       12.4         264       229.0       84.0       4.771       22.3       12.4         265       229.2       83.8       4.771       22.2       12.3         266       228.7       84.3       4.771       22.3       12.4         267       228.1       84.9       4.771       22.4       12.4         268       227.3       85.7       4.771       22.5       12.5         269       226.4       86.6       4.771       22.6       12.5	262	227.6	85.4	4.771	22.4	12.5
265     229.2     83.8     4.771     22.2     12.3       266     228.7     84.3     4.771     22.3     12.4       267     228.1     84.9     4.771     22.4     12.4       268     227.3     85.7     4.771     22.5     12.5       269     226.4     86.6     4.771     22.6     12.5		228.3	84.7	4.771	22.3	12.4
265     229.2     83.8     4.771     22.2     12.3       266     228.7     84.3     4.771     22.3     12.4       267     228.1     84.9     4.771     22.4     12.4       268     227.3     85.7     4.771     22.5     12.5       269     226.4     86.6     4.771     22.6     12.5			84.0	4.771	22.3	
266     228.7     84.3     4.771     22.3     12.4       267     228.1     84.9     4.771     22.4     12.4       268     227.3     85.7     4.771     22.5     12.5       269     226.4     86.6     4.771     22.6     12.5			83.8	4.771	22.2	12.3
267     228.1     84.9     4.771     22.4     12.4       268     227.3     85.7     4.771     22.5     12.5       269     226.4     86.6     4.771     22.6     12.5					22.3	12.4
268     227.3     85.7     4.771     22.5     12.5       269     226.4     86.6     4.771     22.6     12.5				4.771	22.4	
269 226.4 86.6 4.771 22.6 12.5			85.7	4.771	22.5	
		226.4	86.6	4.771		
	270	226.5	86.5	4.771	22.6	12.5

Ave. Elev. Azimuth	Effective 3 to 16 km	Antenna Height	ERP (dBk)	F(50-50) Distance to 60 dBu Contour km	F(50-50) Distance to 70 dBu Contour km
Deg T.	Meters AMSL	Meters AAT	4.771	22.6	12.5
271	226.7	86.3	4.771 4.771	22.5	12.5
272	226.9	86.1 25.8		22.5 22.5	12.5
273	227.2	85.8 05.0	4.771 4.771	22.4	12.4
274	228.0	85.0 85.0	4.771 4.771	22.5	12.5
275	227.4	85.6 87.0	4.771 4.771	22.7	12.6
276	225.8	87.2		22.9	12.7
277	224.2	88.8	4.771	23.0	12.8
278	223.0	90.0	4.771	23.1	12.8
279	222.0	91.0	4.771	23.1	12.9
280	221.2	91.8	4.771	23.3	12.9
281	221.1	91.9	4.771	23.3 23.1	12.8
282	222.2	90.8	4.771		12.7
283	224.2	88.8	4.771	22.9	12.7
284	226.6	86.4	4.771	22.6	12.4
285	228.6	84.4	4.771	22.3	12.4
286	229.5	83.5	4.771	22.2	12.3
287	229.3	83.7	4.771	22.2	
288	228.5	84.5	4.771	22.3	12.4 12.5
289	227.6	85.4	4.771	22.4	12.5
290	226.8	86.2	4.771	22.5	12.5
291	226.3	86.7	4.771	22.6	12.5
292	226.1	86.9	4.771	22.6	12.6
293	225.9	87.1	4.771	22.7	12.6
294	225.8	87.2	4.771	22.7	12.6
295	225.6	87.4	4.771	22.7	12.6
296	225.3	87.7	4.771	22.7	12.6
297	224.8	88.2	4.771	22.8	12.6
298	224.3	88.7	4.771	22.9	12.7
299	223.8	89.2	4.771	22.9	12.7
300	223.5	89.5	4.771	23.0	12.7
301	223.5	89.5	4.771	23.0	12.7
302	223.6	89.4	4.771	22.9	12.7
303	223.5	89.5	4.771	23.0	12.7
304	223.2	89.8	4.771	23.0	12.8
305	222.9	90.1	4.771	23.0	12.8
306	222.4	90.6	4.771	23.1	12.8
307	221.4	91.6	4.771	23.2	12.9
308	220.1	92.9	4.771	23.4	13.0
309	218.7	94.3	4.771	23.5	13.1
310	217.8	95.2	4.771	23.7	13.1
311	217.4	95.6	4.771	23.7	13.2
312	217.7	95.3	4.771	23.7	13.1
313	218.5	94.5	4.771	23.6	13.1
314	219.8	93.2	4.771	23.4	13.0
315	221.5	91.5	4.771	23.2	12.9
316	223.1	89.9	4.771	23.0	12.8
317	224.4	88.6	4.771	22.8	12.7

Ave. Elev. Azimuth Deg T.	Effective 3 to 16 km Meters AMSL	Antenna Height Meters AAT	ERP (dBk)	F(50-60) Distance to 60 dBu Contour km	F(50-50) Distance to 70 dBu Contour km
318	225.4	87.6	4.771	22.7	12.6
319	226.8	86.2	4.771	22.5	12.5
320	228.5	84.5	4.771	22.3	12.4
320 321	230.1	82.9	4.771	22.1	12.3
322	231.2	81.8	4.771	22.0	12.2
323	232.2	80.8	4.771	21.8	12.1
324	233.4	79.6	4.771	21.7	12.1
325	234.7	78.3	4.771	21.5	12.0
326	235.7	77.3	4.771	21.4	11.9
327	236.2	76.8	4.771	21.3	11.9
328	236.2	76.8	4.771	21.3	11.9
329	236.1	76.9	4.771	21.3	11.9
330	236.0	77.0	4.771	21.3	11.9
331	236.2	76.8	4.771	21.3	11.9
332	236.3	76.7	4.771	21.3	11.9
333	236.7	76.3	4.771	21.2	11.8
334	237.2	75.8	4.771	21.2	11.8
335	238.1	74.9	4.771	21.0	11.7
336	239.2	73.8	4.771	20.9	11.6
337	240.4	72.6	4.771	20.7	11.6
338	241.4	71.6	4.771	20.6	11.5
339	242.0	71.0	4.771	. 20.5	11.4
340	242.6	70.4	4.771	20.4	11.4
341	243.0	70.0	4.771	20.4	11. <b>4</b>
342	243.3	69.7	4.771	20.3	11.4
343	242.9	70.1	4.771	20.4	11.4
344	241.8	71.2	4.771	20.5	11.5
345	240.2	72.8	4.771	20.8	11.6
346	238.4	74.6	4.771	21.0	11.7
347	236.1	76.9	4.771	21.3	11.9
348	234.0	79.0	4.771	21.6	12.0
349	232.6	80.4	4.771	21.8	12.1
350	232.5	80.5	4.771	21.8	12.1
351	233.1	79.9	4.771	21.7	12.1
352	234.6	78.4	4.771	21.5	12.0
353	236.1	76.9	4.771	21.3	11.9
354	237.2	75.8	4.771	21.2	11.8
355	238.1	74.9	4.771	21.0	11.7
356	238.4	74.6	4.771	21.0	11.7
357	238.5	74.5	4.771	21.0	11.7
358	238.7	74.3	4.771	21.0	11.7
359	238.9	74.1	4.771	20.9	11.7



